MULTIPLE AXIS PRINTHEAD ADJUSTER FOR NON-CONTACT FLUID DEPOSITION DEVICES

ABSTRACT OF THE DISCLOSURE

Non-contact fluid deposition devices having multiple axis printhead adjusters are provided. The subject printhead adjusters are made up of a single rigid frame that holds at least one printhead housing, where in certain embodiments multiple printhead housings, e.g., two, are held in side-by-side configuration in the single rigid frame of the adjuster. Each housing is adjusted in said adjuster by its own set of axis adjustment elements, where the set includes a rotational axis adjustment element for each horizontal and/or vertical axis adjustment element that is present. In using the subject devices, a printhead present in the adjuster is loaded with a volume of fluid, which in many embodiments is a fluid that includes a biopolymer or precursor thereof. The loaded printhead is then placed in opposing relation to a surface of a substrate and actuated to deposit a volume of fluid on the substrate. Prior to fluid loading and/or deposition, the printhead is typically adjusted with the set of axis adjustment elements. The subject invention finds use in a variety of applications, including the production of biopolymeric arrays.